NOAA Teacher at Sea
Karolyn Braun
Onboard NOAA Ship KA'IMIMOANA
October 6 – 28, 2006

NOAA Teacher at Sea: **Karolyn Braun**
NOAA Ship KA'IMIMOANA
Mission: TAO Buoy Array Maintenance
Friday, October 20, 2006

Plan of the Day
630 early Breakfast
700 Retrieve and Deploy TAO buoy 8S/170W
Deep CTD cast
ARGO float deployment

TAS Braun contacts the winch to bring up the CTD carousel.

Well after a long and fun-filled three-day transit we arrived safely at our new longitude line, 170W, to follow. The ship was buzzing early with preparations to retrieve the TAO buoy. Mother ocean is VERY calm with a small swell but smooth as velvet. Why is that you ask? Well, the winds cause waves on the surface of the ocean (and on lakes). The wind transfers some of its energy to the water, through friction between the air molecules and the water molecules. Stronger winds (like storm surges) cause larger waves. You can make your own miniature waves by blowing across the surface of a pan of water.

Waves of water do not move horizontally, they only move up and down (a wave does not represent a flow of water). You can see a demonstration of this by watching a floating buoy or a bird bob up and down with a wave; it does not, however, move horizontally with the wave. So the lack of waves makes things easier on the boat but tough on the fantail spooling, as there is little breeze to keep cool. By 800 the buoy was secured and the spooling fun begun. We finished spooling the line and prepped for the deployment just as lunch was beginning. Perfect timing. After a full belly and some much needed rest indoors we deployed the *"Samoan Legend" b*uoy and spent the next three and half hours releasing the line before dropping anchor. We finished conducting a 3000m CTD and released an ARGO when Mr. Moon greeted us. Another wonderful day in paradise…Good night!